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Terms	Documents
(front same rear same connector same hole) and (backplane or (back adj1 plane))	161

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side by side			
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L1	(front same rear same connector same hole) and (backplane or (back adj1 plane))	161	L1

END OF SEARCH HISTORY

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Search Results -

Terms	Documents
(front same rear same connector same hole) and (backplane or (back adj1 plane))	4

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	<i>DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>		
<u>L2</u>	(front same rear same connector same hole) and (backplane or (back adj1 plane))	4	<u>L2</u>
	<i>DB=PGPB,USPT,USOC; PLUR=YES; OP=OR</i>		
<u>L1</u>	(front same rear same connector same hole) and (backplane or (back adj1 plane))	161	<u>L1</u>

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
(439/78 439/79 439/445 439/572 716/15 340/825 326/62 174/52.1 361/724 361/748 361/803 361/788 361/760 710/305 710/300 710/301 710/302 710/303 710/313 370/464).ccls.	11266

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DATE: Monday, December 06, 2004 [Printable Copy](#) [Create Case](#)

SetName Query

side by

side

DB=PGPB,USPT,USOC; PLUR=YES; OP=OR

L3 710/305,300-
 303,313;439/78,79,445,572;326/62;340/825;370/464;716/15;174/52.1;361/724,748,803,788,760;

DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

L2 (front same rear same connector same hole) and (backplane or (back adj1 plane))

DB=PGPB,USPT,USOC; PLUR=YES; OP=OR

L1 (front same rear same connector same hole) and (backplane or (back adj1 plane))

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L1 and L3	29

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L4  

Search History

DATE: Monday, December 06, 2004 [Printable Copy](#) [Create Case](#)

Set
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 side by
 side

DB=PGPB,USPT,USOC; PLUR=YES; OP=OR

L4 11 and L3

L3 710/305,300-

303,313;439/78,79,445,572;326/62;340/825;370/464;716/15;174/52.1;361/724,748,803,788,760;

DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

L2 (front same rear same connector same hole) and (backplane or (back adj1 plane))

DB=PGPB,USPT,USOC; PLUR=YES; OP=OR

L1 (front same rear same connector same hole) and (backplane or (back adj1 plane))

END OF SEARCH HISTORY

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1	BRS	L1	21	(front same rear same (connector near5 hole))	USPAT	2004/12/06 14:19			

Start EAST - [Untitled1:1]

EAST - [Untitled1:1] Microsoft Excel

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 ☒ L1: (21) (front same rear sa
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☐ Queue
☐ Trash

DBs: ☒ Plurals

Default operator: ☒ Highlight all hit terms initially

(front same rear same (connector near5 hole)) and (backplane or (back adj1 plane))

	U	1	Document ID	Issue Date	Pages	Title	Current OR	Current XRef
1	<input type="checkbox"/>	<input type="checkbox"/>	US 6759598 B2	20040706	18	Power distribution backplane	174/261	174/250
2	<input type="checkbox"/>	<input type="checkbox"/>	US 6757177 B2	20040629	10	Stacked backplane assembly	361/788	361/790; 361/803
3	<input type="checkbox"/>	<input type="checkbox"/>	US 6654235 B2	20031125	15	Portable workstation computer	361/683	150/165; 206/320;
4	<input type="checkbox"/>	<input type="checkbox"/>	US 6544045 B1	20030408	9	Surface mounted right angle electrical connector	439/79	
5	<input type="checkbox"/>	<input type="checkbox"/>	US 6535397 B2	20030318	16	Interconnect structure for interconnecting electronic	361/788	333/260; 333/33;
6	<input type="checkbox"/>	<input type="checkbox"/>	US 6468108 B1	20021022	9	Electrical connector with improved board locks	439/567	439/572; 439/607
7	<input type="checkbox"/>	<input type="checkbox"/>	US 6351786 B1	20020226	26	VXI backplane system improvements and methods	710/303	710/300; 710/301
8	<input type="checkbox"/>	<input type="checkbox"/>	US 6091609 A	20000718	25	Electronic circuit card having transient-tolerant	361/794	307/43; 361/729;
9	<input type="checkbox"/>	<input type="checkbox"/>	US 6058019 A	20000502	24	Electronic circuit card assembly having confined	361/760	174/51; 312/223.1;
10	<input type="checkbox"/>	<input type="checkbox"/>	US 6036529 A	20000314	12	Connector assembly with cable guide	439/445	439/446; 439/447
11	<input type="checkbox"/>	<input type="checkbox"/>	US 6014319 A	20000111	24	Multi-part concurrently maintainable electronic	361/788	307/43; 361/729;

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front and rear and connector

Search☐ Check to search within this result set**Results Key:****JNL** = Journal or Magazine **CNF** = Conference **STD** = Standard**1 Face-Lock™ optical fiber connector design and fabrication***Sheem, S.; Zhang, F.; Allen, E.; Lu, S.; Low, S.;*Electronic Components and Technology Conference, 1997. Proceedings., 47th
21 May 1997

Pages:410 - 413

[\[Abstract\]](#) [\[PDF Full-Text \(684 KB\)\]](#) [IEEE CNF](#)

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Face-Lock™ optical fiber connector design and fabrication

Sheem, S. Zhang, F. Allen, E. Lu, S. Low, S.

Berkeley Opt. Co., Livermore, CA, USA ;

This paper appears in: Electronic Components and Technology Conference Proceedings., 47th

Meeting Date: 05/18/1997 - 05/21/1997

Publication Date: 18-21 May 1997

Location: San Jose, CA USA

On page(s): 410 - 413

Reference Cited: 3

Number of Pages: 1294

Inspec Accession Number: 5709588

Abstract:

In order to reduce the part and labor cost of optical fiber **connectors**, desirable level close to that of coaxial cable **connectors**, photolithography and plastic molding technology are used in combination to create a novel structure in which through-hole positioning optical fibers are micromachined from the **rear** side of a silicon wafer. Recesses and ridges are fabricated on the **front** side of the wafer for two-dimensional lateral alignment of the through-holes and the fibers.

Index Terms:

[micromachining](#) [optical fibre couplers](#) [optical fibre fabrication](#) [photolithography](#) [plastic molding](#) [packaging](#) [Face-Lock fiber connector](#) [fiber connector fabrication](#) [micromachined through-hole](#) [optical fiber connector design](#) [photolithography](#) [plastic molding technology](#) [recesses](#) [two-dimensional lateral alignment](#)

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L2: Entry 1 of 4

File: EPAB

Sep 17, 2003

PUB-NO: EP001345484A1

DOCUMENT-IDENTIFIER: EP 1345484 A1

TITLE: Backplane system with non-standard signals

PUBN-DATE: September 17, 2003

INVENTOR-INFORMATION:

NAME

COUNTRY

LINARES, IGNACIO A

US

GAMMENTHALER, ROBERT S JR

US

DUBOIS, GERALD R

US

ASSIGNEE-INFORMATION:

NAME

COUNTRY

CIT ALCATEL

FR

APPL-NO: EP03004409

APPL-DATE: February 27, 2003

PRIORITY-DATA: US09205202A (March 5, 2002)

INT-CL (IPC): H05 K 7/14

EUR-CL (EPC): H05K007/14; H05K007/14

ABSTRACT:

CHG DATE=20031203 STATUS=O>A system and method for introducing user-defined (e.g., proprietary) signals into a standard backplane. In addition to standardized connectorization, at least one of the front side connector segments or at least one of the rear side connector segments is provided with additional non-standard connector holes, thereby forming an extra-wide segment. The inclusion of extra contact points in a connector segment allows for supporting an independent signal pathway to carry one or more user-defined signals across the backplane, in addition to the standard bus signals, without sacrificing compliance with the applicable bus standard.

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L2: Entry 1 of 4

File: EPAB

Sep 17, 2003

PUB-NO: EP001345484A1

DOCUMENT-IDENTIFIER: EP 1345484 A1

TITLE: Backplane system with non-standard signals

PUBN-DATE: September 17, 2003

INVENTOR-INFORMATION:

NAME

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US

GAMMENTHALER, ROBERT S JR

US

DUBOIS, GERALD R

US

ASSIGNEE-INFORMATION:

NAME

COUNTRY

CIT ALCATEL

FR

APPL-NO: EP03004409

APPL-DATE: February 27, 2003

PRIORITY-DATA: US09205202A (March 5, 2002)

INT-CL (IPC): H05 K 7/14

EUR-CL (EPC): H05K007/14; H05K007/14

ABSTRACT:

CHG DATE=20031203 STATUS=O>A system and method for introducing user-defined (e.g., proprietary) signals into a standard backplane. In addition to standardized connectorization, at least one of the front side connector segments or at least one of the rear side connector segments is provided with additional non-standard connector holes, thereby forming an extra-wide segment. The inclusion of extra contact points in a connector segment allows for supporting an independent signal pathway to carry one or more user-defined signals across the backplane, in addition to the standard bus signals, without sacrificing compliance with the applicable bus standard.

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L2: Entry 3 of 4

File: DWPI

Nov 6, 2003

DERWENT-ACC-NO: 2003-714729
DERWENT-WEEK: 200374
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TITLE: Backplane device for introduction of proprietary signals used in e.g. telecommunication field, has front and rear side portions with connector holes

INVENTOR: DUBOIS, G R; GAMMENTHALER, R S ; LINARES, I A

PRIORITY-DATA: 2002US-0092113 (March 5, 2002)

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PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> <u>US 20030208648 A1</u>	November 6, 2003		000	G06F013/00
<input type="checkbox"/> <u>EP 1343361 A2</u>	September 10, 2003	E	014	H05K007/14

INT-CL (IPC): G06 F 13/00; H05 K 7/14

ABSTRACTED-PUB-NO: EP 1343361A
BASIC-ABSTRACT:

NOVELTY - The backplane comprises a front side portion with several front connector holes, that are organized into a set of front connector segments. There is a rear side portion with several rear connector holes organized into a set of rear connector segments that correspond to the front connector segments.

DETAILED DESCRIPTION - The front connector holes of at least one front connector segment, and the rear connector holes of a rear connector segment that corresponds to at least one front connector segment, are dimensioned such that the front segment and corresponding rear segment are electrically separated. Additionally the front connector segment and the corresponding rear segment are operable to support independent signal pathways.

INDEPENDENT CLAIMS are included for a method of introducing user defined signals into a Compact Peripheral Component Interconnect (CPCI) compliant backplane, and for a connector system.

USE - For introduction of proprietary signals into a backplane used in e.g. telecommunication field.

ADVANTAGE - Provides a carrying capacity for additional signals, without interference with the bus standard employed, and effectively precludes interoperability with compliant off-the-shelf cards.

DESCRIPTION OF DRAWING(S) - The figure shows a CPCI (compact peripheral component interconnect) connector system

P1 segment 112A
P2 segment 112B
CPCI bus 516
Secondary bus 518
Connector system 600
Front side card panel 604A
Rear side card panels 604B

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)

[First Hit](#) [Previous Doc](#) [Next Doc](#) [Go to Doc#](#)

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L4: Entry 1 of 29

File: PGPB

Nov 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030208648
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030208648 A1

TITLE: System and method for introducing proprietary signals into a standard
backplane via physical separation

PUBLICATION-DATE: November 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Linares, Ignacio A.	Plano	TX	US	
Gammenthaler, Robert S.	Frisco	TX	US	
Dubois, Gerald R.	Richardson	TX	US	

APPL-NO: 10/ 092113 [PALM]
DATE FILED: March 5, 2002

INT-CL: [07] G06 F 13/00

US-CL-PUBLISHED: 710/300
US-CL-CURRENT: 710/300

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A system and method for introducing user-defined (e.g., proprietary) signals into a standard backplane. A front side backplane portion is provided with a set of connector holes that are electrically separated from corresponding connector holes provided on the backplane's rear side portion. Thus, whereas the separated front side connector portion is operable with standard bus signals, the rear side connector portion can support an independent signal pathway to carry one or more user-defined signals.

CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] This application discloses subject matter related to the subject matter disclosed in the following commonly owned co-pending patent application(s): (i) "Backplane System And Method For Introducing Non-Standard Signals," application No. _____, filed _____, in the names of: Ignacio A. Linares, Robert S. Gammenthaler, Jr., and Gerald R. Dubois (Attorney Docket No.: 1285-0083US).

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L4: Entry 1 of 29

File: PGPB

Nov 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030208648
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030208648 A1

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NAME	CITY	STATE	COUNTRY	RULE-47
Linares, Ignacio A.	Plano	TX	US	
Gammenthaler, Robert S.	Frisco	TX	US	
Dubois, Gerald R.	Richardson	TX	US	

APPL-NO: 10/ 092113 [\[PALM\]](#)
DATE FILED: March 5, 2002

INT-CL: [07] [G06 F 13/00](#)

US-CL-PUBLISHED: 710/300
US-CL-CURRENT: [710/300](#)

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A system and method for introducing user-defined (e.g., proprietary) signals into a standard backplane. A front side backplane portion is provided with a set of connector holes that are electrically separated from corresponding connector holes provided on the backplane's rear side portion. Thus, whereas the separated front side connector portion is operable with standard bus signals, the rear side connector portion can support an independent signal pathway to carry one or more user-defined signals.

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L4: Entry 1 of 29

File: PGPB

Nov 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030208648
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030208648 A1

TITLE: System and method for introducing proprietary signals into a standard
backplane via physical separation

PUBLICATION-DATE: November 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Linares, Ignacio A.	Plano	TX	US	
Gammenthaler, Robert S.	Frisco	TX	US	
Dubois, Gerald R.	Richardson	TX	US	

APPL-NO: 10/ 092113 [PALM]
DATE FILED: March 5, 2002

INT-CL: [07] G06 F 13/00

US-CL-PUBLISHED: 710/300
US-CL-CURRENT: 710/300

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A system and method for introducing user-defined (e.g., proprietary) signals into a standard backplane. A front side backplane portion is provided with a set of connector holes that are electrically separated from corresponding connector holes provided on the backplane's rear side portion. Thus, whereas the separated front side connector portion is operable with standard bus signals, the rear side connector portion can support an independent signal pathway to carry one or more user-defined signals.

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L4: Entry 21 of 29

File: USPT

Mar 14, 2000

US-PAT-NO: 6036529

DOCUMENT-IDENTIFIER: US 6036529 A

TITLE: Connector assembly with cable guide

DATE-ISSUED: March 14, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Brown; Michael	Orleans			CA
Dynie; Ernest R.	Nepean			CA
Rhodes; Steven	Nepean			CA

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Nortel Networks Corporation	Montreal			CA	03

APPL-NO: 09/ 161432 [\[PALM\]](#)

DATE FILED: September 24, 1998

INT-CL: [07] [H01](#) [R](#) [13/56](#)

US-CL-ISSUED: 439/445; 439/446, 439/447

US-CL-CURRENT: [439/445](#); [439/446](#), [439/447](#)

FIELD-OF-SEARCH: 439/445, 439/446, 439/449

PRIOR-ART-DISCLOSED:

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
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<input type="checkbox"/>	3345604	October 1967	Henschen et al.	439/310
<input type="checkbox"/>	4367967	January 1983	Albert, Jr.	403/41
<input type="checkbox"/>	4678867	July 1987	Bongard et al.	174/135
<input type="checkbox"/>	5037175	August 1991	Weber	385/76
<input type="checkbox"/>	5315062	May 1994	Hoshino	174/52
<input type="checkbox"/>	5421740	June 1995	Dittburner et al.	439/736

☐ 5816842 October 1998 Thantrakul et al. 439/374

OTHER PUBLICATIONS

IBM Technical Disclosure Bulletin, vol. 34 No. 1, pp. 150-151, Jun. 1991.

ART-UNIT: 283

PRIMARY-EXAMINER: Bradley; Paula

ASSISTANT-EXAMINER: Nguyen; Truc

ABSTRACT:

A connector assembly for releasably interconnecting at least one cable connector connected to a respective cable to at least one module connector attached to a module. The connector assembly comprises a hollow body portion, a cable guide portion and a connector sub-assembly for mating with the cable connector and the module connector. The majority of the connector sub-assembly is placed inside the body portion. The cable guide portion is pivotally connected to the body portion of the connector assembly to permit movement of the cable guide portion between an open position in which access to manually mate or unmate the cable connector with the connector sub-assembly is provided and a closed position in which the cable guide portion prevents such access. The cable guide guides the respective cable and prevents breakage of the respective cable due to excessive bending.

22 Claims, 8 Drawing figures

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)

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L4: Entry 21 of 29

File: USPT

Mar 14, 2000

US-PAT-NO: 6036529

DOCUMENT-IDENTIFIER: US 6036529 A

TITLE: Connector assembly with cable guide

DATE-ISSUED: March 14, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Brown; Michael	Orleans			CA
Dynie; Ernest R.	Nepean			CA
Rhodes; Steven	Nepean			CA

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Nortel Networks Corporation	Montreal			CA	03

APPL-NO: 09/ 161432 [\[PALM\]](#)

DATE FILED: September 24, 1998

INT-CL: [07] [H01](#) [R](#) [13/56](#)

US-CL-ISSUED: 439/445; 439/446, 439/447

US-CL-CURRENT: [439/445](#); [439/446](#), [439/447](#)

FIELD-OF-SEARCH: 439/445, 439/446, 439/449

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<input type="checkbox"/>	4367967	January 1983	Albert, Jr.	403/41
<input type="checkbox"/>	4678867	July 1987	Bongard et al.	174/135
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<input type="checkbox"/>	5315062	May 1994	Hoshino	174/52
<input type="checkbox"/>	5421740	June 1995	Dittburner et al.	439/736

☐ 5816842 October 1998 Thantrakul et al. 439/374

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IBM Technical Disclosure Bulletin, vol. 34 No. 1, pp. 150-151, Jun. 1991.

ART-UNIT: 283

PRIMARY-EXAMINER: Bradley; Paula

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ABSTRACT:

A connector assembly for releasably interconnecting at least one cable connector connected to a respective cable to at least one module connector attached to a module. The connector assembly comprises a hollow body portion, a cable guide portion and a connector sub-assembly for mating with the cable connector and the module connector. The majority of the connector sub-assembly is placed inside the body portion. The cable guide portion is pivotally connected to the body portion of the connector assembly to permit movement of the cable guide portion between an open position in which access to manually mate or unmate the cable connector with the connector sub-assembly is provided and a closed position in which the cable guide portion prevents such access. The cable guide guides the respective cable and prevents breakage of the respective cable due to excessive bending.

22 Claims, 8 Drawing figures

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)



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Elmore et al.

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(54) **VXI BACKPLANE SYSTEM
IMPROVEMENTS AND METHODS**

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(*) **Notice:** This patent issued on a continued pro-
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154(a)(2).

Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-
claimer.

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(57) **ABSTRACT**

A VXI product plug-in is provided herein that is capable of higher component density. The plug-in is configured to occupy two standard size slots of a standard VXI chassis, and includes two sets of three horizontally stacked modules in upper and lower sub-compartments of a front compart-ment of the plug-in carrier. The six modules have the capability of being populated with 480 switching relays, which provides for a 50 percent increase in the number of switches over the prior art plug-ins. The plug-in carrier includes a rear compartment that houses a VXI bus inter- facing circuit, including a mezzanine board, a bridge board, and optionally a controller board, for interconnecting the switch modules with a VXI backplane bus. The Plug-in further includes an internal backplane situated within the carrier between the front and rear compartments that provides an interface between the modules and the VXI bus interconnecting circuit, and specifically, include a bus that can selectively couple modules together. Other aspects of the invention include an automatic updating scheme for updating the software installed on the controller card so that it has the necessary data and program code to operate new modules, an emergency reset mechanism for opening all relays per- tinent to one module, and a mechanism for facilitating the insertion and removal of a VXI plug-in to and from a VXI chassis.

20 Claims, 16 Drawing Sheets

